

Application No.: 10/698,257

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Docket No.: 535352003600

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:
William W. CHENG et al.

Application No.: 10/698,257

Confirmation No.: 2940

Filed: October 30, 2003

Art Unit: 2816

For: DIGITAL-TO-ANALOG CONVERTER WITH
ALWAYS-ON CASCODE TRANSISTORS

Examiner: Kenneth B. Wells

DECLARATION UNDER 37 C.F.R. § 1.132

MS RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

1. I, Don Devendorf, am an expert in the field of digital to analog converters and was an expert at the time of the invention. I am presently employed at TelASIC Communications Inc. I have over 30 years of experience in high-performance analog and mixed signal design with Hughes and Raytheon. During that time I was the leading developer of high performance ADCs and DACs for use in advanced radar and communications signal processing. I am currently listed as the inventor in 25 issued patents along with additional pending applications. While at Raytheon, I held the title of Raytheon Principal Fellow, a title given only to a handful of the most accomplished technologists out of Raytheon's 90,000 personnel. I was also the technical founder of Raytheon's Advanced Products Group, which continued the Hughes development strategy developing over 150 high performance IC chips for defense and commercial applications. While at Hughes I was also the recipient of the prestigious Hughes LA Hyland Patent award.

2. In response to the Examiner's argument that the claims are obvious in light of the prior art, I declare the following:

One skilled in the art at the time of the invention would not have attempted to combine a digital circuitry (logic gate), taught in Baskett, with an analog circuit (digital to analog converter), as taught in the admitted prior art, because it was not common digital to analog converter design practice to do so. In fact, it is often difficult to combine analog and digital circuitries. Such challenge is confirmed by the fact that the present invention is achieved utilizing the experiences gained from a number of previous DAC designs using our prior art using the current and earlier process technologies and devices, and only after months of experiments and tests on actual builds of prototypes because computer simulation could not provide accurate real world results. During these tests, the inventors had to experiment with different architectures to achieve the present invention. Moreover, the invention also solved the long felt but unsolved need in the industry by providing superior isolation leading to significant reduction of the analog output spurious signals. This has led to the successful commercialization of the present invention.

3. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Respectfully Submitted

Date: 8-30-07


Don Devendorf